



DEPARTMENT OF THE NAVY

PROGRAM EXECUTIVE OFFICE
LITTORAL AND MINE WARFARE
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From: Program Executive Officer, Littoral and Mine Warfare (PMS 485)
To: Director, Office of Protected Resources
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
1315 East-West Highway
Silver Spring, Maryland 20910

Subj: APPLICATION FOR RENEWALS OF LETTERS OF AUTHORIZATION FOR THE
TAKING OF MARINE MAMMALS INCIDENTAL TO THE OPERATION OF
SURTASS LFA SONAR ONBOARD R/V *CORY CHOUEST* AND USNS
IMPECCABLE (T-AGOS 23) UNDER NMFS FINAL RULE (50 CFR 216
SUBPART Q)

Ref: (a) Final Rule: Taking and Importing Marine Mammals; Taking
Marine Mammals Incidental to Navy Operations of
Surveillance Towed Array Sensor System Low Frequency
Active Sonar (Fed. Reg. V67 N136, 16 July 2002)
(b) Letter of Authorization Governing the Take of Marine
Mammals Incidental to the U.S. Navy's Operation of
Surveillance Towed Array Sensor System Low Frequency
Active (SURTASS LFA) Sonar on the USNS IMPECCABLE, Office
of Protected Resources, National Marine Fisheries
Service, August 13, 2004
(c) Letter of Authorization Governing the Take of Marine
Mammals Incidental to the U.S. Navy's Operation of
Surveillance Towed Array Sensor System Low Frequency
Active (SURTASS LFA) Sonar on the R/V *Cory Chouest*,
Office of Protected Resources, National Marine Fisheries
Service, August 13, 2004
(d) Stipulation Regarding Permanent Injunction, Civ. No.
02-3805-EDL, United States District Court, Northern
District of California, San Francisco Division,
October 14, 2003
(e) Application for Letters of Authorization for the Taking
of Marine Mammals Incidental to the Operation of SURTASS
LFA Sonar Onboard R/V *Cory Chouest* and USNS IMPECCABLE
(T-AGOS 23) under NMFS Final Rule (50 CFR 216 Subpart Q)

- (f) Annual Report No. 2: Operation of the Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) Sonar Onboard the R/V *Cory Chouest* and USNS IMPECCABLE (T-AGOS 23) Under the National Marine Fisheries Service Letters of Authorization of 16 August 2003, Maritime Surveillance Systems (PMS 485), May 2004
- (g) Final Overseas Environmental Impact Statement and Environmental Impact Statement for Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) Sonar, Department of the Navy, January 2001

Encl: (1) North Pacific Ocean Mission Areas and Boundary Conditions - R/V *Cory Chouest* and USNS IMPECCABLE Combined Planned Mission Areas for 4th Year LOAs
 (2) Background for Marine Mammal Density and Stock Estimates for SURTASS LFA 4th Year LOAs
 (3) Estimates for Potential Effects to Marine Mammal Stocks

1. Pursuant to reference (a), renewals of the Letters of Authorization (LOAs) are requested for the Research Vessel (R/V) *Cory Chouest* and USNS IMPECCABLE (T-AGOS 23), for the taking of marine mammals (Levels A and B) incidental to operations of the Navy's Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonars for the 12-month period commencing August 16, 2005, as specified below. Due to critical naval warfare requirements, the Chief of Naval Operations (CNO) has identified the necessity for both SURTASS LFA vessels to be stationed in the North Pacific Ocean to conduct testing, training and routine operations. In addition, recent real-world contingencies have dictated that the Navy request expansions to the mission areas authorized under the current LOAs for the USNS IMPECCABLE and R/V *Cory Chouest* (references [b] and [c]) and by the Stipulation Regarding Permanent Injunction (reference [d]). The analyses performed herein are based on 16 missions, regardless of which vessel is performing a specific mission. Total transmission time will not exceed 432 hours combined for both vessels.

2. The proposed mission areas requested under this application are comprised of portions of biogeographic provinces 50, 53, 54, 56, 63, 64, and 69 as described in reference (a) (50 CFR 216.180). These include the mission areas requested and authorized under the current LOAs (references [b] and [c]), as limited by the Permanent Injunction (reference [d]). However, to train against recent real-world contingencies, the Navy has determined that there are requirements to expand these areas to modify the: 1) eastern boundary of the north western Pacific Ocean area from 10 degrees N/150 degrees E and 40 degrees N/150 degrees E to 10 degrees N/180 degrees E and 40 degrees

N/180 degrees E and 2) the southern boundary of the South China Sea area to 11 degrees N/111 degrees E and 12.5 degrees N/118 degrees E. Enclosure (1) provides graphical representations of these mission areas and the boundary conditions thereto.

3. Under the provisions of the Stipulation Regarding Permanent Injunction (enclosure [d]) if the Navy wishes to seek an alteration to the stipulated operational areas for the final two years of the Final Rule, they must meet and confer with the plaintiffs with the assistance of a court-designated mediator. This process commenced in February 2005 and is ongoing. Because the outcome of this process has not been completed before the required submittal date of this document, the Navy's application includes the proposed expansion areas for completeness. Upon completion of the mediation, the Navy will make any required modifications to bring the application inline with modified orders from the Court.

4. The same analytical methodology utilized in the application for the current LOAs (reference [e]) and the most recent Annual Report (reference [f]) was utilized to provide reasonable and realistic estimates of the potential effects to marine mammal stocks, as set forth in the SURTASS LFA Overseas Environmental Impact Statement/ Environmental Impact Statement (OEIS/EIS) (reference [g]). This analytical methodology was used to estimate the potential effects to marine mammal stocks specific to the potential mission areas as presented in enclosure (1). It is infeasible to analyze all potential mission areas for all species' stocks for all seasons. In this application, sites and seasons are based on reasonable and realistic choices for SURTASS LFA operations proposed herein. The CNO's mission for SURTASS LFA operations to be conducted under the requested LOAs is to train the Navy crews manning the vessels and to test and operate the LFA systems in as many and varied at sea environments as possible. The Navy has determined that the SURTASS LFA sonar testing and training operations that are the subject of NMFS' July 16, 2002, Final Rule (reference [a]) constitute a military readiness activity as that term is defined in Public Law 107-314 (16 U.S.C. § 703 note) because those activities constitute "training and operations of the Armed Forces that relate to combat" and constitute "adequate and realistic testing of military equipment, vehicles, weapons and sensors for proper operation and suitability for combat use."

5. Enclosure (2) provides information on how the density and stock/abundance estimates were derived for the selected acoustic model sites shown in enclosure (1). These data were derived from current, available published source documentation, and provided general area information for each mission area with species-specific

information on the animals that could potentially occur in that area, including estimates for their stock/abundance and density.

6. Enclosure (3) provides estimates of potential effects to marine mammal stocks during the 12-month period commencing August 16, 2005. These values support the conclusion that estimates of potential effects to marine mammal stocks are below the criteria delineated by NMFS in reference (a). Upon completion of the missions under the requested authorization, these estimates will be refined and submitted to NMFS under the reporting requirements of reference (a), and the conditions of the LOAs, as issued.

7. SURTASS LFA sonar will be operated in accordance with the geographic restrictions and monitoring mitigation delineated in references (a) and (g); additional interim operational restrictions delineated in reference (a); the conditions of the LOAs, as issued; and the restrictions of the Permanent Injunction as delineated in reference (d), as modified.

8. For the period of the LOAs, the means to increase knowledge of marine mammal species and determine the level of impacts on marine mammals from potential takes will be determined by the Navy in consultation with NMFS. Long-term independent scientific research efforts on topics designed to fill data gaps and further the overall understanding of the effects of anthropogenic sound and noise on the marine environment are being performed to fulfill conditions of the Final Rule and LOAs, to provide data for a supplemental environmental impact statement, and to address concerns raised by the Court. These research efforts are discussed in the Annual Report No. 2 (reference [f]) under the current LOAs.

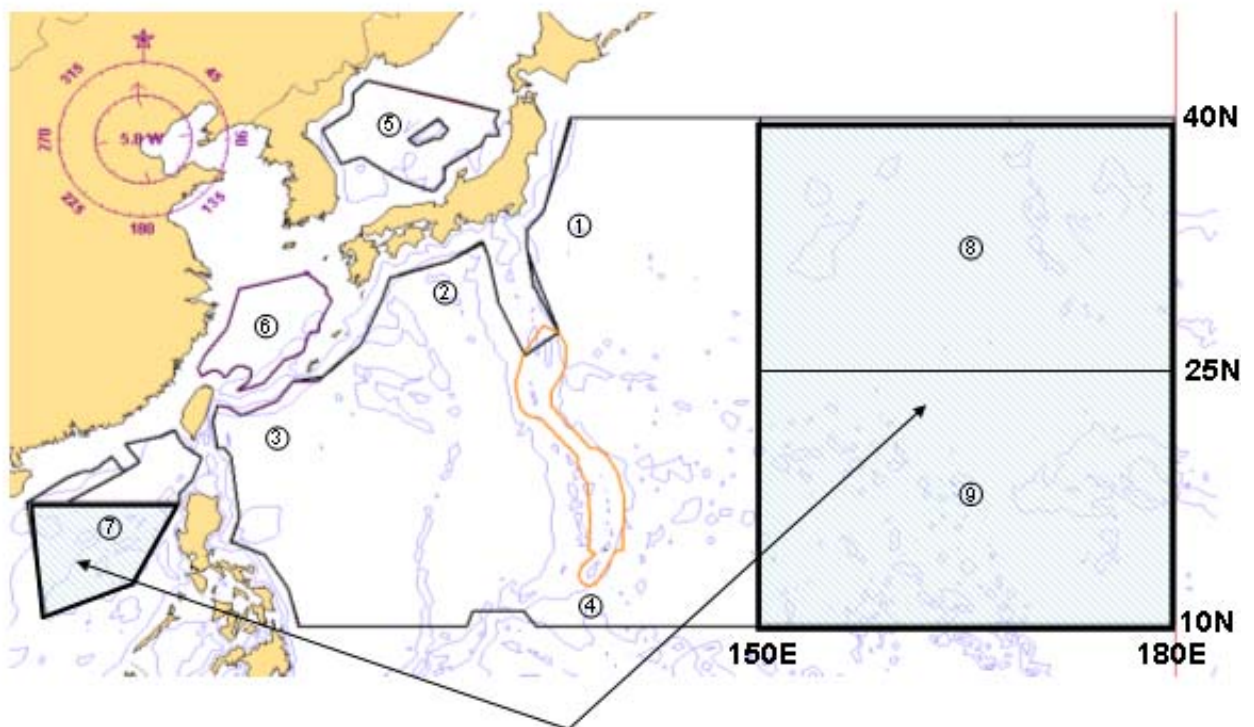
9. If current mission plans are modified to the extent that operating area different or additional to the biomes/provinces described in paragraph (1) above are required, and/or updates to enclosure (3) estimates become necessary, this letter will be revised and resubmitted to NMFS as early as possible.

10. The point of contact for this effort is Mr. Joseph S. Johnson, who can be reached at (858) 537-8967.

J. S. JOHNSON
By direction

Enclosure (1)
North Pacific Ocean Mission Areas and Boundary Conditions – R/V *Cory Chouest* and
USNS IMPECCABLE Combined Planned Mission Areas for 4th Year LOAs

Mission Areas and Sites



SURTASS LFA Required OPAREA Expansion

Mission Area Boundary Conditions

Mission Area	Site	Boundary Conditions
Stipulated East of Japan	1	Conduct ops at least 30 nm offshore. From May through November, for ops north of 34 N, remain in waters deeper than 3000 meters or at least 30 nm offshore, whichever is a greater distance offshore, due to presumed beaked whale habitat.
Stipulated North Philippine Sea	2	Conduct ops at least 60 nm offshore or 30 nm seaward of the 200-m isobath.
Stipulated West Philippine Sea	3	From December through April, conduct ops in waters offshore of the 5000 meter isobath or 60 nm offshore, whichever is a greater distance offshore, due to presumed humpback whale breeding/calving areas in shallow, near-shore waters. During other months, conduct ops at least 60 nm offshore or 30 nm seaward of the 200-m isobath.
Stipulated Guam	4	Conduct ops at least 30 nm offshore.
Sea of Japan	5	Conduct all ops in waters deeper than 1000 meters or at least 30 nm offshore, whichever proves the greatest distance offshore, and avoid the Yamato Rise due to presumed beaked whale habitat. This also addresses presumed gray whale migration activity in shallow, near-shore waters during January, March and December.
East China Sea	6	Conduct all ops at least 30 nm offshore, which addresses presumed gray whale migration activity December through March in shallow near-shore waters; and presumed humpback whale breeding/calving activity in shallow, near-shore waters of Okinawa and Miyako Retto Islands December through April. For ops December through March remain southeast of line between 34N/126E and 30N/122E due to presumed gray whale migration activity. Length of ops may have to be shortened in winter due to minke J-stocks.
South China Sea	7	Conduct all ops at least 30 nm offshore, which addresses presumed gray whale migration activity in shallow, near-shore waters and presumed gray whale breeding/calving activity in shallow, near-shore waters of Hainan Island; and presumed humpback whale breeding/calving activity in shallow, near-shore waters of Batan and Babuyan Islands in the Luzon Strait.
Offshore Expansion North	8	Conduct ops at least 30 nm offshore.
Offshore Expansion South	9	Conduct ops at least 30 nm offshore.

Enclosure (2)
Background for Marine Mammal Density and Stock Estimates for SURTASS LFA
4th Year LOAs

Enclosure (3)
Estimates for Potential Effects to Marine Mammal Stocks

Table 3-1. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 1

East of Japan					
Site 1	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) ≥ 180 dB
	Blue whale	60	9250	0.10	0.00
	Fin whale	60	9250	0.10	0.00
	Sei whale	180	37000	0.07	0.00
	Bryde's whale	180	22000	0.12	0.00
	Minke whale	1080	25000	0.69	0.00
	N. Pacific right whale	3	922	0.05	0.00
	Sperm whale	300	102112	0.04	0.00
	Kogia	930	350553	0.04	0.00
	Baird's beaked whale	870	8000	1.52	0.00
	Cuvier's beaked whale	1620	90725	0.25	0.00
	Ginkgo-toothed beaked whale	150	22799	0.09	0.00
	Hubbs' beaked whale	150	22799	0.09	0.00
	False killer whale	1080	16668	1.15	0.00
	Pygmy killer whale	630	30214	0.37	0.00
	Short-finned pilot whale	3840	53608	1.20	0.00
	Risso's dolphin	2910	83289	0.72	0.00
	Common dolphin	22830	3286163	0.14	0.00
	Bottlenose dolphin	5130	168791	0.62	0.00
	Spinner dolphin	150	1015059	0.00	0.00
	Pantropical spotted dolphin	7770	438064	0.35	0.00
	Striped dolphin	3330	570038	0.11	0.00
	Rough-toothed dolphin	1770	145729	0.24	0.00
	Fraser's dolphin	1200	220789	0.11	0.00
	Pacific white-sided dolphin	2460	67769	0.71	0.00

Table 3-2. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 2

North Philippine Sea					
Site 2	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) \geq 180 dB
	Bryde's whale	180	22000	0.11	0.00
	Minke whale	1080	25000	0.56	0.00
	N. Pacific right whale	3	922	0.04	0.00
	Sperm whale	300	102112	0.04	0.00
	Kogia	930	350553	0.03	0.00
	Cuvier's beaked whale	1620	90725	0.23	0.00
	Blainville's beaked whale	150	8032	0.24	0.00
	Ginkgo-toothed beaked whale	150	22799	0.09	0.00
	Killer whale	120	12256	0.14	0.00
	False killer whale	870	16668	0.73	0.00
	Pygmy killer whale	630	30214	0.29	0.00
	Melon-headed whale	360	36770	0.14	0.00
	Short-finned pilot whale	4590	53608	1.20	0.00
	Risso's dolphin	3180	83289	0.64	0.00
	Common dolphin	16860	3286163	0.08	0.00
	Bottlenosed dolphin	4380	168791	0.44	0.00
	Spinner dolphin	150	1015059	0.00	0.00
	Pantropical spotted dolphin	4110	438064	0.14	0.00
	Striped dolphin	9870	570038	0.26	0.00
	Rough-toothed dolphin	1770	145729	0.18	0.00
	Fraser's dolphin	1200	220789	0.08	0.00
	Pacific white-sided dolphin	3570	67769	0.79	0.00

Table 3-3. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 3

West Philippine Sea					
Site 3	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) \geq 180 dB
	Fin whale	60	9250	0.36	0.00
	Bryde's whale	180	22000	0.45	0.00
	Minke whale	540	25000	1.14	0.00
	Humpback whale (winter only)	0	394	0.00	0.00
	Sperm whale	300	102112	0.12	0.00
	Kogia	510	350553	0.06	0.00
	Cuvier's beaked whale	90	90725	0.03	0.00
	Blainville's beaked whale	150	8032	0.84	0.00
	Ginkgo-toothed beaked whale	150	22799	0.30	0.00
	False killer whale	870	16668	2.79	0.00
	Pygmy killer whale	630	30241	1.11	0.00
	Melon-headed whale	4290	36770	6.21	0.00
	Short-finned pilot whale	2280	53608	2.25	0.00
	Risso's dolphin	3180	83289	2.34	0.00
	Common dolphin	16860	3286163	0.30	0.00
	Bottlenose dolphin	4380	168791	1.59	0.00
	Spinner dolphin	150	1015059	0.00	0.00
	Pantropical spotted dolphin	4110	438064	0.54	0.00
	Striped dolphin	4920	570038	0.51	0.00
	Rough-toothed dolphin	1770	145729	0.72	0.00
	Fraser's dolphin	1200	220789	0.33	0.00
	Pacific white-sided dolphin	7350	67769	6.39	0.00

Table 3-4. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 4

Guam					
Site 4	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) ≥ 180 dB
	Blue whale	60	9250	0.21	0.00
	Fin whale	60	9250	0.21	0.00
	Bryde's whale	270	22000	0.45	0.00
	Minke whale	60	25000	0.09	0.00
	Humpback whale (winter only)	0	4005	0.00	0.00
	Sperm whale	300	102112	0.09	0.00
	Kogia	510	350553	0.03	0.00
	Cuvier's beaked whale	1620	90725	0.54	0.00
	Blainville's beaked whale	390	8032	1.50	0.00
	False killer whale	630	16668	1.68	0.00
	Melon-headed whale	2790	36770	3.39	0.00
	Short-finned pilot whale	600	53608	0.51	0.00
	Risso's dolphin	210	83289	0.15	0.00
	Bottlenose dolphin	750	168791	0.27	0.00
	Spinner dolphin	3000	1015059	0.15	0.00
	Pantropical spotted dolphin	31410	438064	3.81	0.00
	Striped dolphin	18060	570038	1.68	0.00
	Rough-toothed dolphin	1740	145729	0.63	0.00

Table 3-5. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 5

Sea of Japan					
Site 5	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) ≥ 180 dB
	Fin whale	270	9250	0.98	0.00
	Bryde's whale	30	22000	0.04	0.00
	Minke whale	120	25000	0.16	0.00
	Minke J stock	48	893	1.80	0.00
	Gray whale	3	100	1.00	0.00
	N. Pacific right whale	3	922	0.10	0.00
	Sperm whale	240	102112	0.06	0.00
	Stejneger's beaked whale	420	8000	1.56	0.00
	Baird's beaked whale	90	8000	0.34	0.00
	Cuvier's beaked whale	1290	90725	0.42	0.00
	Ginkgo-toothed beaked whale	150	22799	0.20	0.00
	False killer whale	810	9777	3.24	0.00
	Melon-headed whale	3	36770	0.00	0.00
	Short-finned pilot whale	420	53608	0.30	0.00
	Risso's dolphin	2190	83289	1.18	0.00
	Common dolphin	25800	3286163	0.32	0.00
	Bottlenose dolphin	270	105138	0.12	0.00
	Spinner dolphin	3	1015059	0.00	0.00
	Pantropical spotted dolphin	4110	219032	0.78	0.00
	Pacific white-sided dolphin	900	67769	0.54	0.00
	Dall's porpoise	15600	76720	8.36	0.00

Table 3-6. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 6

East China Sea					
Site 6	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) ≥ 180 dB
	Fin whale	60	500	1.90	0.00
	Bryde's whale	180	22000	0.13	0.00
	Minke whale	1080	25000	0.69	0.00
	Minke J stock	432	893	7.68	0.00
	Gray whale (winter only)	3	100	0.48	0.00
	N. Pacific right whale	3	922	0.05	0.00
	Sperm whale	300	102112	0.04	0.00
	Kogia	510	350553	0.02	0.00
	Cuvier's beaked whale	1560	90725	0.22	0.00
	Blainville's beaked whale	270	8032	0.44	0.00
	Ginkgo-toothed beaked whale	150	22799	0.09	0.00
	False killer whale	540	9777	0.72	0.00
	Pygmy killer whale	90	30214	0.04	0.00
	Melon-headed whale	630	36770	0.26	0.00
	Short-finned pilot whale	1080	53608	0.30	0.00
	Risso's dolphin	3180	83289	0.68	0.00
	Common dolphin	13830	3286163	0.06	0.00
	Bottlenose dolphin	4380	105138	0.74	0.00
	Spinner dolphin	330	1015059	0.01	0.00
	Pantropical spotted dolphin	4122	219032	0.32	0.00
	Striped dolphin	4920	570038	0.14	0.00
	Rough-toothed dolphin	1770	145729	0.20	0.00
	Fraser's dolphin	1200	220789	0.09	0.00
	Pacific white-sided dolphin	840	67769	0.21	0.00

Table 3-7. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 7

South China Sea					
Site 7	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) ≥ 180 dB
	Fin whale	60	9250	0.09	0.00
	Bryde's whale	180	22000	0.65	0.00
	Minke whale	120	25000	0.07	0.00
	Gray whale (winter only)	0	100	0.00	0.00
	Sperm whale	300	102112	0.03	0.00
	Kogia	510	350553	0.01	0.00
	Cuvier's beaked whale	90	90725	0.01	0.00
	Blainville's beaked whale	150	8032	0.17	0.00
	Ginkgo-toothed beaked whale	150	22799	0.07	0.00
	False killer whale	540	9777	0.82	0.00
	Pygmy killer whale	630	30214	0.31	0.00
	Melon-headed whale	2610	36770	1.06	0.00
	Short-finned pilot whale	2289	53608	0.64	0.00
	Risso's dolphin	3180	83289	0.75	0.00
	Common dolphin	13830	3286163	0.07	0.00
	Bottlenose dolphin	4380	105138	0.82	0.00
	Spinner dolphin	330	1015059	0.01	0.00
	Pantropical spotted dolphin	4122	219032	0.33	0.00
	Striped dolphin	4929	570038	0.15	0.00
	Rough-toothed dolphin	1200	145729	0.15	0.00
	Fraser's dolphin	1200	220789	0.10	0.00

Table 3-8. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 8

Offshore Japan 25-40°N					
Site 8	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) ≥ 180 dB
	Blue whale	90	9250	0.30	0.00
	Fin whale	30	9250	0.10	0.00
	Sei whale	3	37000	0.00	0.00
	Bryde's whale	9	22000	0.02	0.00
	Minke whale	90	25000	0.12	0.00
	Sperm whale	90	102112	0.02	0.00
	Kogia	1470	350553	0.12	0.00
	Baird's beaked whale	30	8000	0.10	0.00
	Cuvier's beaked whale	510	90725	0.16	0.00
	<i>Mesoplodon</i> spp	150	22799	0.18	0.00
	False killer whale	1080	16668	2.30	0.00
	Pygmy killer whale	3	30214	0.00	0.00
	Melon-headed whale	3	36770	0.00	0.00
	Short-finned pilot whale	15	53608	0.00	0.00
	Risso's dolphin	300	83289	0.14	0.00
	Common dolphin	25890	3286163	0.30	0.00
	Bottlenose dolphin	150	168791	0.04	0.00
	Spinner dolphin	3	1015059	0.00	0.00
	Pantropical spotted dolphin	5430	438064	0.48	0.00
	Striped dolphin	15000	570038	1.04	0.00
	Rough-toothed dolphin	3	145729	0.61	0.00
	Pacific white-sided dolphin	1440	67769	1.23	0.00

Table 3-9. Estimates of Percentage of Marine Mammal Stocks Potentially Affected for Site 9

Offshore Japan 10-25°N					
Site 9	Animal	# Animals in Area	# Animals Stock	% Affected (w/mit) 120-180 dB	% Affected (w/mit) ≥ 180 dB
	Bryde's whale	9	22000	0.02	0.00
	Sperm whale	105	102112	0.02	0.00
	Kogia	270	350553	0.02	0.00
	Cuvier's beaked whale	510	90725	0.16	0.00
	False killer whale	630	16668	0.67	0.00
	Short-finned pilot whale	270	53608	0.16	0.00
	Risso's dolphin	780	83289	0.38	0.00
	Common dolphin	25890	3286163	0.30	0.00
	Bottlenose dolphin	210	168791	0.06	0.00
	Spinner dolphin	2670	1015059	0.10	0.00
	Pantropical spotted dolphin	24060	438064	1.08	0.00
	Striped dolphin	3300	570038	0.22	0.00
	Rough-toothed dolphin	360	145729	0.10	0.00